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Keller et al.(10) **Pub. No.: US 2018/0108226 A1**(43) **Pub. Date: Apr. 19, 2018**(54) **SKIN STRETCH INSTRUMENT****Publication Classification**(71) Applicant: **Oculus VR, LLC**, Menlo Park, CA
(US)(51) **Int. Cl.**
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Redmond, WA (US)(52) **U.S. Cl.**
CPC **G08B 6/00** (2013.01)(57) **ABSTRACT**

A sensor records information about skin stretch perceived by a user based on an interaction with a real object. The sensor includes a mechanical housing configured to be worn on a finger of a user, and a mechanism coupled to the mechanical housing. The mechanism includes a first bearing that rotates in a first direction in response to an interaction with a surface. The mechanism also includes a second bearing coupled to the first bearing, such that rotation of the first bearing causes the second bearing to rotate in a direction opposite to the first direction. The second bearing is in contact with a portion of the finger, and includes a feedback surface that simulates a force associated with the interaction with the surface. The sensor includes a controller configured to monitor rotation of the second bearing and record skin stretch information responsive to the interaction with the surface.

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